## Restoring Butte:

A Mile High and A Mile Deep in 15 samples of Meconium

On Friday, December 13, Dr. Kai Elgethun, Regional Director for the Agency for Toxic Substances and Disease Registry (ATSDR) released a memo to local and state health officials (see breakout of letter). ATSDR is an agency within the U.S. Department of Health and Human Services. It's the same agency that sampled the blood and urine of nearly 400 Anaconda residents for lead and arsenic in 2018. ATSDR released its final report on Anaconda in October 2019 declaring that the levels of arsenic and lead in the former smelting town's residents were normal.

There are two important sections in the ATSDR letter to point out for many worried Butte citizens. One is that ATSDR "does not concur with the author's closing statement of a "potential public health emergency," a statement that is not taken lightly by ATSDR." Further, the agency "does not anticipate that a public health emergency is imminent based on the results of the McDermott et al. study."

In closing, Dr. Elgethun hopes that the letter "will reduce unnecessary anxiety caused by the public health emergency statement put forth by the authors of the recent study."

The "recent study" is a pilot study published by researchers Dr. Suzanne McDermott, Dr. Katie Hailer and Dr. Jamie Lead, in which they declared a "potential public health emergency" because of what they interpreted to be startlingly-high levels of metals – namely copper, manganese and zinc – in Butte babies' meconium. (Again, meconium is the first feces passed by a newborn, usually within the first 24 hours of life outside the womb.)

Keeping in step with the latest developments, *The Montana Standard* published an editorial on Sunday (December 15) titled "More comprehensive health research must be funded." This is at least the seventh story in the daily newspaper since news of the study broke on November 26. I agree it is a crucially important issue. Further, collecting more research and data is the best way to ultimately conclude if the Butte community is safe. However, I think we may be losing sight of some factual developments taking place amongst all the scientific drama.

For starters, two different federal agencies (EPA and ATSDR) have now concluded that the concentrations of metals in Butte babies' meconium sampled in McDermott, Hailer and Lead's pilot study are within normal ranges when compared to other studies on metals in meconium. The only samples that appear to show "startling" differences, as described by the researchers are the ones from South Carolina.

It is based on these conclusions that both EPA and ATSDR do not believe there is any public health emergency. That said, now that the alarm is sounded, most people – general public included – would like to see more robust data and analysis just to be sure.

I'm going to come right out and say it: I believe it was inappropriate if not irresponsible for the researchers to use the term "public health emergency" in their publication. The only entity authorized to call a public health emergency is the Secretary of the Department of Health and Human Services, and on the state or local level, that's to be done in conjunction with those appropriate counterparts. And it's for good reason. The turmoil and fear generated here in Butte over a "potential" emergency has been chaotic the past couple of weeks.

Furthermore, the researchers didn't have the courtesy to share their published data and findings with the appropriate public health entities and officials before going to the newspaper. Maybe that's not the way it's supposed to work. If so, I stand corrected and apologize for insinuating a lack of consideration. However, this sensational method of communication has resulted in tremendous anxiety for many folks in Butte. For the unknown parents of the 15 newborns who were part of the study, anxiety is probably a gross understatement. Was any consideration given to their emotions or wellbeing?

The lead author, Dr. McDermott has only shared her thoughts and information on the study directly and solely with the daily newspaper. The same goes for fellow South Carolina researcher, Dr. Lead. At least Dr. Hailer has generously made herself available to discuss the study and its findings at two public meetings, in addition to the media – but only after the study came falling down from the ivory tower, so to speak.

As a result, there's been a lot of undue angst to go around and a lot of scrambling. The good news is that all parties mobilized quickly and seem to have gathered at this point. Perhaps local officials and others working on the Superfund cleanup and health study work would be more gathered, receptive and cooperative if there were more dialogue to start.

I'm not sure why that dialogue doesn't seem to be taking place. I've heard both sides (EPA's and one of the researcher's) of how a meeting went down in March 2019 in which the preliminary and unpublished meconium data was shared. Based on these descriptions of this one-time attempt, both sides could go further to work on better communication and cooperation, in my opinion. Butte has a local health director, board of health and a Superfund health study working group – all good places to start a conversation prior to going to the media.

It's also worth noting that this pilot study is the third by one or more of the same researchers that's been broken to the Butte community first and foremost via the front page of the daily newspaper. Again, maybe I'm missing something, but let's try not to let this happen again. All parties should strive to do better in communicating and working cooperatively to resolve the main issue here: how to make sure that Butte is a safe place to live, work and raise a family.

In closing, I feel it's important to reinforce the positives and in this case, to acknowledge where there is agreement. The most important area of agreement seems to be that all parties – including the public – agree more research is necessary in order to draw further conclusions.

To be fair, "more research" was in the conclusion of McDermott, Hailer and Lead's pilot study. Unfortunately, when you sound the "public health emergency" alarm, that is a bell that once sounded can't be un-rung and which drowns out everything else.

It would be nice to count on timely and sufficient funding from a federal agency to get this additional research done quickly. However, that will likely take too long without congressional support. I would urge the parties involved to look for other sources of funding if we want to get this done in an expedited fashion.

Finally, while we wait to determine a source of funding and what additional data needs to be gathered and how, perhaps Dr. McDermott and Dr. Lead could grace us with their presence in Butte to explain a little more about the data collected in South Carolina. This would be helpful, now that there are at least two entities that have concluded Butte's numbers for metals are in the same range as those communities sampled in other studies. One thing is certain: more of the "he said, she said" on the front page of the paper isn't productive.

And while I can't do it officially on behalf of the researchers or the publication, I would like to apologize to the young mothers and fathers and expecting parents of our community for the stress this news has undoubtedly caused. At this point, you may rest assured that it doesn't appear you or your baby have anything out of the ordinary to worry about. Further, there are lots of people committed to making sure everyone living here is as safe as can be – especially your little ones!